

# **Power Amplifiers**

model FET-1500M model FET-1500C



FET-1500M



FET-1500C

shly, the first professional audio manufacturer to release a MOS-FET power amplifier, is proud to introduce the next generation, the FET-1500 Series. During its first decade, our original FET Series became a standard for applications requiring the utmost in sonic excellence, and extreme reliability. We

applications requiring the utmost in sonic excellence and extreme reliability. We now improve upon that reputation by offering more models with better specifications than ever before.

The **FET-1500** series is offered in two variations:

The **FET-1500M** features LED meters and balanced XLR or 1/4" inputs. This design is intended for demanding sound reinforcement, broadcast facilities, recording studios, or any application where visual monitoring and interfacing with balanced equipment is essential.

The FET-1500C is designed to meet the needs of professional industrial installations such as theater, public address and stadium use. In these situations meters and XLR inputs are not typically required, so the FET-1500C is supplied without meters and utilizes barrier strip and 1/4" inputs. This amplifier provides all of the same performance benefits as the FET-1500M at a lower cost.

The **FET-1500** series represents Ashly's ongoing dedication to extending the

boundaries of technology. Simple, stable circuitry produces better sound. Ashly MOS-FET amplifiers use a complementary, all-discrete design. The driver is pure class-A and, because it has only two stages, requires little compensation allowing both speed and linearity with no crossover-notch distortion.

The output stage consists of paralleled power MOS-FETs for current gain. The MOS-FETs have smooth transconductance curves and run at a relatively high idle current, again preventing crossover notch distortion. They require no dissipation-limiting protective circuitry and provide virtually infinite power gain, keeping load reflections from the driver stage. This promotes stability and low distortion when driving reactive loads like loud-speakers.

Special attention is paid to overload performance; when an Ashly amp is overdriven, it will clip cleanly with a slightly rounded edge totally free from spikes and glitches. Total immunity to power supply variations insures that transient distortions are never generated on program material with wide dynamic range.

The result: powerful and quick amplifiers that deliver unrestrained, uncolored sound quality with remarkable accuracy. Each Ashly power amplifier, like all Ashly products, is now fully covered by our exclusive five-year worry-free warranty.

Five-Year Worry-Free Warranty

MOS-FET
Output Devices

Class-A Full Complementary Front End

**Modular Construction** 

XLR and 1/4" inputs on "M" Models

Barrier Strip and 1/4" Inputs on "C" Models

Stereo, Mono & Bridging Modes

LED meters on "M" models

Forced Air Cooling

Perfect Overload and Square Wave Response

Stable Into Any Load

Self-Protecting Under Virtually All Conditions

## **Specifications**

#### **POWER OUTPUT**

EIA SPECIFICATION (±1dB <1% THD 20Hz-20kHz) STEREO (Rated Per Channel)

> 4 ohms: 300 Watts RMS 8 ohms: 200 Watts RMS

MONO BRIDGED

8 ohms: 600 Watts RMS

FTC SPECIFICATION (min power <.01% SMPTE IMD) STEREO (Rated Per Channel)

4 ohms: 275 Watts RMS 8 ohms: 175 Watts RMS

8 ohms: MONO BRIDGED

8 ohms: 550 Watts RMS

Total Harmonic Distortion: .004% 1kHz,8Ω

.01% 20Hz,8 $\Omega$ 

.05% 20Hz-20kHz,8 $\Omega$ 

IM Distortion (SMPTE): .004%  $8\Omega$  (IHF): .01%  $8\Omega$ 

Damping Factor: >100 20Hz-20kHz

Bandwidth: 100kHz Slew Rate: 50V/μS

Frequency Response: ± .5dB 10Hz-50kHz

Rise Time:  $2\mu$ S 10%-90%

Full Power Input Sensitivity: 1.3V

Hum and Noise: >110dB below full output Power Requirements: 110-125VAC, 50-60Hz

Size: 19"L x 3.5"H x 16"D

Shipping Weight: 47 lbs

### **Architect's Specification**

Ashly Model 1500M

The power amplifier, being of two channels, shall deliver a minimum power of 175 watts per channel into 8 ohm loads or 275 watts per channel into 4 ohm loads with both channels operating. When switched into bridged mono mode, it shall deliver at least 550 waits into an 8 ohm load. The amplifier shall be immune to damage from shorted, open, or mismatched loads. The amplifier shall have a gain of 29dB  $\pm$  .5dB per channel and an input sensitivity of 1.3 Volts ± 2% for full rated output. Frequency response shall be 10Hz to 20kHz ± .5dB. It shall be stable into any load including pure capacitors and inductors. Hum and noise shall be at least 110dB below full output and SMPTE intermodulation distortion shall be less than .01% at full output. The amplifier shall have rear panel switching for mono and bridging modes and rear mounted level controls. The inputs shall be balanced bridging type with male and female XLR type connectors as well as 1/4" phone jacks. A three-color LED type indicator shall be employed to show the power level of each channel and self contained forced air cooling shall be used. The power output devices shall be of the Lateral MOS-FET type. The amplifier shall weigh 37lb, net and mount in a standard 19 inch rack using two spaces (3.5" high). The power requirement shall be 110-125VAC, 50-60Hz,

The power amplifier shall be an Ashly FET-1500M.

#### Ashly Model 1500C

The power amplifier, being of two channels, shall deliver a minimum power of 175 watts per channel into 8 ohm loads or 275 watts per channel into 4 ohm loads with both channels operating. When switched into bridged mono mode, it shall deliver at least 550 watts into an 8 ohm load. The amplifier shall be immune to damage from shorted, open, or mismatched loads. The amplifier shall have a gain of 29dB ± .5dB per channel and an input sensitivity of 1.3 Volts ± 2% for full rated output. Frequency response shall be 10Hz to 20kHz ± .5dB. It shall be stable into any load including pure capacitors and inductors. Hum and noise shall be at least 110dB below full output and SMPTE intermodulation distortion shall be less than .01% at full output. The amplifier shall have rear panel switching for mono and bridging modes and rear mounted level controls. The inputs shall utilize 1/4" phone jacks as well as terminal/barrier input strips. Self contained forced air cooling shall be used. The power output devices shall be of the Lateral MOS-FET type. The amplifier shall weigh 37lb. net and mount in a standard 19 inch rack using two spaces (3.5" high). The power requirement shall be 110-125VAC, 50-60Hz.

The power amplifier shall be an Ashly FET-1500C.



To provide maximum flexibility, Ashly offers two variations in our FET Power Amplifiers:

The FET-1500M (top) features XLR and 1/4" inputs.

The FET-1500C (bottom) utilizes Barrier Strips and 1/4" inputs.

Ashly Audio Inc.



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